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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

March 22, 2010

Dave Kaumheimer
Environmental Program Manager
Columbia-Cascades Area Office
1917 Marsh Road
Yakima, Washington 98901

Re: EPA comments on Cle Elum Dam Fish Passage Facilities and Fish Reintroduction Project. Project Number: 09-014-BOR

Dear Mr. Kaumheimer:

The U.S. Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (DEIS) regarding the Cle Elum Dam Fish Passage Facilities and Fish Reintroduction Project (FP/FR) near Cle Elum, Washington. Our review of the Notice of Intent (NOI) was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The DEIS was prepared in cooperation between the Bureau of Reclamation (BOR) and the Washington Department of Ecology (DOE) to analyze two projects that propose to restore ecological connectivity and natural production of anadromous fish in Cle Elum Reservoir and upper Cle Elum River watershed. The projects and alternatives are:

1. Provide fish passage at Cle Elum Dam (BOR).
    - Alternative 1 No Action Alternative
    - Alternative 2- Right bank juvenile passage with left bank adult passage with barrier dam
    - Alternative 3 (Preferred Alternative)- Right bank juvenile passage with right bank adult passage without barrier dam
2. Active fish reintroduction to accelerate juvenile salmon repopulation in Cle Elum River above the dam (DOE).
    - Alternative 1- No Action Alternative
    - Alternative 2- Fish Reintroduction Project

Our review and comments focus on Fish Passage Alternative 3 and Fish Reintroduction Alternative 2.

Goals of the FP/FR project are to restore populations of sockeye; promote diversity and abundance of coho, Chinook salmon, and Pacific lamprey to self-sustaining levels; contribute to the recovery of ESA-listed upper Mid-Columbia River steelhead; and reconnect isolated

populations of ESA-listed bull trout. We support the planning efforts, which identified Cle Elum dam as a priority through BOR's Phase 1 Assessment of potential fish passage at the five major Yakima Project storage dam sites. We also support the Yakama Nation and Washington Department of Fish and Wildlife co-management of the Yakima basin fisheries and work to develop a reintroduction plan for anadromous fish species above BOR's Yakima Storage Dams. We are encouraged that the EIS includes both proposals, which provides a more holistic approach at promoting fish populations in the basin.

The EIS is well organized and analyzes the two project components separately while discussion their relevance to one another. Many sections include a well thought out discussion such as background of fish species in the basin, which provides the reader with the context and need for passage and reintroduction. We believe that the EIS should include additional detail regarding impacts to water quality, fish reintroduction, components of the project's design, mitigation, and cumulative impacts. We also have concerns to potential impacts to water quality. Based on this, we have rated the DEIS EC-2 (Environmental Concerns-Insufficient Information). Our detailed comments are attached.

Please feel free to contact Lynne McWhorter of my staff at, (206) 553- 0205 or at mcwhorter.lynne@epa.gov with any questions or to further discuss these comments.

Sincerely,

Christine B. Reichgott

Christine B. Reichgott, Unit Manager
Environmental Review and Sediment Management Unit

Enclosure

EPA Comments on the Cle Elum Dam Fish Passage and Fish Reintroduction Draft EIS

General Comments

Fish Passsage

The EIS lacks sufficient detail to understand project components associated with the fish passage. Figure 2-6 illustrates Alternative 3 and the EIS discusses the basis for the overall design and function. However, there is a lack of information regarding construction activities, potential impacts from construction, permits or requirements associated with construction, and mitigation measures.

The EIS states that water quality standards could potentially be exceeded and that a mixing zone may be required. There are no details regarding predicted water quality compared to water quality standards or further discussion about a potential mixing zone. Therefore, we have concerns with the project's potential impacts to water quality and lack of understanding of the current conditions and predictions. We recommend that the EIS include numerical data of current conditions and predictions compared to water quality standards.

Fish Reintroduction

In general there is a lack of information regarding cumulative effects of adults traveling from the marine environment to the fish passage facility and the likelihood that populations would establish. The EIS also briefly discusses at the end of the analysis that a hatchery may be needed to support sockeye salmon; however, there is no mention of potential hatchery being built in the alternatives.

The EIS states that WDFW and Yakama Nation will coordinate for adaptation to climate change impacts. We support and encourage BOR and other agencies to also coordination with relevant stakeholders (Tribes, water districts, etc) and consider developing plans to respond to climate change impacts to storage and water quality.

Specific Comments

Project Design

Sections 2.4 and 2.5. The EIS discusses the intake structure, juvenile fish bypass conduit, and upstream adult fish passage ladder. The EIS should also discuss the basis for design and link design elements to other projects that have been successful for fish passage at other dams. If this proposal is unique, the EIS should state that and describe how design elements were developed and provide reference to studies supporting this proposal.

The EIS states that flows ranging from 100-400 cfs would be released through the juvenile fish passage conduit. It is not clear how these flows were developed to ensure successful passage. The EIS includes Figure 2-5, which illustrates daily Cle Elum Reservoir elevations and minimum elevation for downstream passage. However, this figure is not explained in the text and it is not clear what is meant by 90% and 10% exceedances. It is also appears that at periods of time the minimum flow may only be met for a short period of time, approximately 6 weeks, rather than the average of approximately 4 months. The EIS should discuss more clearly how

the minimum flow for fish passage was developed and how the flows will be met to support fish passage during low water years.

The EIS discusses potential impacts to fish from climate change and low water years. An adaptive management plan should be developed and summarized in the EIS so that it is clear that if unexpected circumstances occur with reintroduction (e.g., pathogens from other basins), that additional actions have been explored and can be implemented.

Section 2.43. The EIS lists construction of temporary roads, improvements to a gravel access road, and construction of a new county road and bridge across the Cle Elum River. It is not clear how the county road relates to the project and the purpose and need behind it. The EIS acknowledges that the county road is being built separately by Kittitas County; however, it is unclear if the new road is being built to support some part of the FP/FR project or in anticipation of a need for increased access. It appears from Figure 2-4 that there is another road (unnamed) that crosses the river and that parallels the proposed new county road. We recommend that the EIS provide some information regarding the purpose of the road and relation to the project. Also, the EIS does not provide details of BMPs that would be implemented from temporary road building and road improvements to reduce impacts to water quality and land disturbance.

Section 5.2.4. The EIS discusses constructing the multilevel intake structure when the lakebed is dry and that any seepage would be collected in a retention pond and that BMPs would be implemented during construction to avoid impacts. It is not clear how the lakebed is going to be dewatered, where the retention pond would be located, and what the characterization of the seepage and sediment would be. We recommend that the EIS provide clear details about this project component under the alternatives section and provide figures illustrating location and size of retention pond, discuss any permits associated with this construction, and describe what will occur with the solids captured on the pervious liner and what the characterization of the solids are.

Section 6.3.3. The EIS states that a fish hatchery may be constructed to support sockeye salmon reintroductions in the basin. The EIS provides details that sockeye reintroduction would occur from adults captured at Priest Rapids Dam and potentially from an out of basin hatchery. The potential need for hatchery is not mentioned in this section and is not clear why this would be the case with sockeye. We are unclear if this could also be the case for other fish species. This potential project element should be disclosed along with assumptions for additional active management for sockeye and predictions of sockeye populations from reintroduction.

Recommendations:

We recommend that the EIS provide additional regarding the basis for design of the proposal and predicted success of the FP/FR. We also recommend referring to relevant studies that support the basis for the design proposal.

We recommend that the EIS discuss more clearly how the minimum flow for fish passage was developed and how the flows will be met to support fish passage during low water years.

We recommend that the EIS discuss an adaptive management plan to support fish reintroduction.

We recommend that the EIS include a disclose the relationship of the county road to the proposal and cumulative impacts of the road on water quality and fish resources.

We recommend that the EIS provide detailed information regarding construction activities, associated permits, and characterization of soils/solids.

We recommend that the EIS include additional information about the potential need for a hatchery to support sockeye.

Permits

Executive Summary, Pg vii. There is a statement that effluent resulting from fish waste products in the raceways could cause minor, temporary water impacts. The EIS should fully discuss the effluent, how it would affect water quality and if a National Pollutant Discharge Elimination System (NPDES) permit would be needed. Please note that a direct discharge of a pollutant to a Water of the U.S. would require a NPDES permit and should be coordinated with the Washington Department of Ecology.

Section 5.24.1. This section states that a Corps of Engineers 404 permit would be needed. It would be helpful to include information about permits in one of the first sections of the EIS and link activities clearly to the associated approval or permit. We recommend that the EIS include additional detail linking the permit or approval to specific activities, the status of approval, authority, and required mitigation to offset potential impacts. This could be shown in a table and briefly describe the associated project component.

Recommendations

We recommend that the EIS provide additional detail to clarify what permits and approvals are required along with status, authority, and summary of mitigation.

Potential Impacts to Fish

We are concerned with the long term success of fish stocks establishing and balancing the need for water storage related to the Yakima Project. The EIS states that the FP/FR will not affect water storage needs (water rights); however, there are potential impacts to water resources from low water years and potential climate change impacts. The EIS states that the FP/FR would improve fish species survival rates during low water years because there will be access to cooler upstream habitat. We support protecting upstream habitat; however there would need to be sufficient water for upstream/downstream passage. The EIS discusses the different operational strategies for maintaining flows and reducing impacts to fish resources (i.e., flip-flop, mini flip-flop, Kittitas Reclamation District canal bypass) and this information is very helpful to understand active water management in the basin. However, it is unclear what the sequence of priorities is for water rights versus water quality and fish resources during low water years. We recommend that the EIS more fully discuss these varying resource needs and clearly state what priorities are for low water years and how water needs would be met for downstream/upstream fish passage.

The analysis focuses on the Cle Elum River and portions of the Yakima River when discussing fish passage and reintroduction. We recommend that the EIS describe the system as a whole for fish migration from marine environment to Cle Elum basin and discuss the limiting

factors and potential cumulative impacts. This could be similar to the projections and limiting factors described in Table 6-1.

Executive Summary, Table 1. Middle Columbia River (MCR) steelhead are listed as threatened under the Endangered Species Act. This table provides a comparison of impacts for fish passage alternatives and states that permanent impacts to MCR critical habitat would occur from construction activities. We acknowledge the overall benefits of the fish passage facility; however, there are concerns with impacts to threatened and endangered species and the lack of information on mitigation of these impacts. The EIS states that consultation with NOAA will occur however, there is no discussion of a Biological Assessment/Biological Evaluation (BA/BE) in the EIS and therefore it is unclear how severe these impacts would be and what measures will be implemented to protect habitat resources. We recommend that the EIS fully describe impacts to Threatened and Endangered Species and coordinate the EIS process with the BA/BE. We also recommend that the final EIS and ROD include mitigation measures as well as terms and conditions required by the Services.

Sections 6.2 and 6.3. The EIS states that the Yakima basin remains one of the most pathogen-free systems in the Columbia River Basin. The most concerning pathogen is IHN-V and water temperature is the most prominent environmental factor affecting the virus with clinical disease occurring between 8° C and 15° C. The EIS states that it is recommended that a fish health monitoring program and protocols be established to minimize potential transfer of pathogens. The Cle Elum River is 303(d) listed for temperature above and below the reservoir. There is no monitoring data or summary about temperature in the river or details of the occurrence of IHN-V in the location(s) that the reintroduced fish would be transferred from. The EIS also does not provide details about a plan other than a recommendation as described above. We recommend that water quality data be disclosed in the EIS, that the level of occurrence of IHN-V and other pathogens at hatchery locations be disclosed, and that a commitment be made to develop a monitoring plan and discussed in the EIS.

Recommendations

We recommend that the EIS provide more direction and detail on the priority for storage and meeting water needs for fish resources.

We recommend that the EIS include a discussion of the migration of salmon in the system from marine to Cle Elum river and include a cumulative impact assessment of potential impacts from this migration route.

We recommend that the EIS include more information on impacts to MCR critical habitat, summary and reference of the BA/Bes for threatened and endangered species, and that mitigation be included in the final EIS and terms and conditions be included in the ROD.

We recommend that water quality data be disclosed in the EIS, that the level of occurrence of IHN-V and other pathogens at hatchery locations be described, and that a commitment be made to develop a monitoring plan and summarized in the EIS.

Water Quality

The EIS states that the Cle Elum River is listed for temperature above and below the Reservoir. The EIS does not discuss the data and related state water quality standards, coordination with the State for the TMDL process, and how the project does not contribute to

further degradation. We recommend that the EIS disclose additional information regarding 303(d) listed waters in the project area.

Section 6.2.3. The EIS states that there would be effluent from the raceways and that it is likely that a mixing zone may be required to allow for some exceedance of water quality standards within the mixing zone. This is the only mention of mixing zone and potential exceedances of water quality. We highly recommend that the EIS discuss the effluent in detail and that the EIS disclose what permits will be obtained how the effluent will meet water quality standards including whether or not the State is allowing a mixing zone in their 401 certification process. We are very concerned about the potential impacts to water quality from effluent and stress that required permits need to be in place and discharge needs to be properly managed and monitored to ensure compliance with applicable laws.

Recommendations

We recommend that the EIS provide additional detail regarding 303(d) listing waters in the project area.

We recommend that the EIS fully disclose the effluent from the raceways and demonstrate that required permits will be acquired. It should also include details of the predicted water quality, potential mixing zone and how water quality standards would be met.